**IN THE CLAIMS**

Claim 1 has been amended as follows:

1. (Currently amended) A method for determining a field strength of radio-frequency energy emitted during a magnetic resonance measurement, comprising the steps of:

from an antenna of a magnetic resonance examination apparatus, generating a radio-frequency field having a field strength associated therewith by emitting at least one radio-frequency pulse from said antenna, and thereby causing an examination subject in said radio-frequency field to emit a magnetic resonance signal;

receiving said magnetic resonance signal; and

determining a phase ~~position~~ of said magnetic resonance signal and, from said phase ~~position~~, determining said field strength.

Claim 2 has been amended as follows:

2. (Currently amended) A method as claimed in claim 1 comprising exciting said magnetic resonance signal in said subject in a spatially resolved manner within a measurement volume, and determining a spatially-dependent phase position of the magnetic resonance signal and determining said field strength as a function of a location within said measurement volume.

Claim 3 has been amended as follows:

3. (Currently amended) A method as claimed in claim 1 comprising receiving said magnetic resonance signal in said subject in a spatially resolved manner within a measurement volume, and determining a spatially-dependent phase

~~position~~ of the magnetic resonance signal and determining said field strength as a function of a location within said measurement volume.

Claim 4 has been amended as follows:

4. (Currently amended) A method as claimed in claim 1 wherein said at least one ~~radio-Frequency~~ radio-frequency pulse produces a flip angle of nuclear spins in said subject, and comprising determining said flip angle from said phase ~~position nd~~ and determining said field strength dependent on said flip angle.

5. (Original) A method as claimed in claim 1 comprising receiving said magnetic resonance signal in a gradient echo technique.

6. (Original) A method as claimed in claim 1 comprising phase-modulating said at least one radio-frequency pulse.

7. (Original) A method as claimed in claim 6 comprising employing a phase-modulated rectangular pulse as said at least one radio-frequency pulse.

Claim 8 has been amended as follows:

8. (Currently amended) A method as claimed in claim 1 comprising receiving said magnetic resonance signals in respectively separate measurements and, for each measurement, determining the phase ~~position~~ of the magnetic resonance signal, and determining a phase difference between the respective ~~phase positions~~ phases from two of said measurements and determining said field strength dependent on said phase difference.

9. (Original) A method as claimed in claim 8 comprising employing measurements, as said separate measurements, that are identical except for the at least one radio-frequency pulse.

10. (Original) A method as claimed in claim 9 comprising emitting said at least one radio-frequency pulse in one of said measurements that starts with a phase, and shifting said phase after a time by a value in a shifted direction, and emitting said at least one radio-frequency pulse in another of said measurements that starts with said phase, and shifting said phase after said time by said value in a direction opposite to said shifted direction.

11. (Original) A method as claimed in claim 1 wherein the step of emitting at least one radio-frequency pulse comprises emitting at least one short, intensive radio-frequency pulse.

12. (Original) A method as claimed in claim 1 wherein said magnetic resonance examination apparatus has a basic magnetic field associated therewith, said basic magnetic field exhibiting spatially-dependent field inhomogeneities, and wherein the step of determining said field strength comprises determining a spatially-dependent field strength taking said spatially-dependent field inhomogeneities into account.

Claim 13 has been amended as follows:

13. (Currently amended) A method as claimed in claim 1 wherein the step of determining said field strength comprises determining a spatially-dependent field strength for a group of adjacent voxels by identifying the phase ~~position~~ of respective magnetic resonance signals for individual voxels in said group and combining the respective ~~phase-positions~~ phases into a common phase ~~position~~, and determining the field strength for said voxel group from said common phase ~~position~~.

Claim 14 has been amended as follows:

14. (Currently amended) A method as claimed in claim 13 wherein each of the magnetic resonance signals for the individual voxels has an amplitude, and comprising weighting the phase ~~position~~ dependent on the amplitude of the associated magnetic resonance signal.

15. (Original) A method as claimed in claim 1 wherein the step of determining said field strength comprises determining a spatially-dependent field strength for a group of adjacent voxels by identifying the phase difference of respective magnetic resonance signals for individual voxels in said group and combining the respective phase differences into a common phase difference, and determining the field strength for said voxel group from said common phase difference.

Claim 16 has been amended as follows:

16. (Currently amended) A method as claimed in claim ~~13~~ 15 wherein each of the magnetic resonance signals for the individual voxels has an amplitude, and comprising weighting the phase difference dependent on the amplitude of the associated magnetic resonance signal.

Claim 17 has been amended as follows:

17. (Currently amended) A method as claimed in claim 1 comprising employing said field strength determined from said phase ~~positions~~ to optimize said field strength in a predetermined volume region of the subject.

Claim 18 has been amended as follows:

18. (Currently amended) A magnetic resonance examination apparatus comprising:

a magnetic resonance scanner adapted to receive a subject therein, said magnetic resonance scanner having a radio-frequency antenna;

a control computer for operating said magnetic resonance scanner, including operating said radio-frequency antenna; and

said control computer operating said magnetic resonance scanner and said radio-frequency antenna to produce a radio-frequency field, having a field strength, by emitting at least one radio-frequency pulse from said radio-frequency antenna and thereby exciting a magnetic resonance signal from said subject, for acquiring said magnetic resonance signal, for determining a phase ~~position~~ of said magnetic resonance signal, and for determining said field strength from said phase ~~position~~.

Claim 19 has been amended as follows:

19. (Currently amended) A computer program product loadable into a control computer of magnetic resonance examination apparatus having a radio-frequency antenna operated by said control computer, said computer program product running in said control computer and causing said control computer to:

operate said antenna to produce a radio-frequency field, having a field strength, by emitting at least one radio-frequency pulse, and thereby exciting a magnetic resonance signal in a subject in said field;

to acquire said magnetic resonance signal; and

to determine a phase ~~position~~ of said magnetic resonance signal and to determine said field strength from said phase ~~position~~.